MAJOR SOURCE OPERATING PERMIT

Permittee: **Tyler Union Foundry Company**

Facility Name: **Tyler Union Foundry Company**

Facility No.: 301-0014

Location: Anniston, Alabama

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

Issuance Date: *March XX, 2016*

Expiration Date: *March 5, 2020*

Alabama Department of Environmental Management

TABLE OF CONTENTS

General Permit Provisos

Federally Enforceable Provisos	Regulations
1. Transfer	
This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1) (a) 5.	Rule 335-3-16-.02(6)
2. Renewals	
An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit.	Rule 335-3-16-.12(2)
The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.	
3. Severability Clause	
The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.	Rule 335-3-16-.05(e)
4. Compliance	
(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.	Rule 335-3-16-.05(f)
(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.	Rule 335-3-16-.05(g)

General Permit Provisos

Federally Enforceable Provisos	Regulations
5. Termination for Cause	
This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.	Rule 335-3-16-.05(h)
6. Property Rights	
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.	Rule 335-3-16-.05(i)
7. Submission of Information	
The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.	Rule 335-3-16-.05(j)
8. Economic Incentives, Marketable Permits, and Emissions Trading	
No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.	Rule 335-3-16-.05(k)
9. Certification of Truth, Accuracy, and Completeness:	
Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness except as provided in Rule 335-3-16-.04(9)(b). This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.	Rule 335-3-16-.07(a)
10. Inspection and Entry	
Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following: (a) Enter upon the permittee's premises where a source is located	Rule 335-3-16-.07(b)

Federally Enforceable Provisos	**Regulations**
or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit; (b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit; (c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit; (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.	
11. <u>Compliance Provisions</u>	
(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.	Rule 335-3-16-.07(c)
(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.	
12. <u>Compliance Certification</u>	
A compliance certification shall be submitted annually within 60 days of the date of issuance of this permit.	Rule 335-3-16-.07(e)
(a) The compliance certification shall include the following: (1) The identification of each term or condition of this permit that is the basis of the certification; (2) The compliance status; (3) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements); (4) Whether compliance has been continuous or intermittent; (5) Such other facts as the Department may require to determine the compliance status of the source;	
(b) The compliance certification shall be submitted to:	

Federally Enforceable Provisos	Regulations
Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463 and to: Air and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303	
13. Reopening for Cause	
Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit: (a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire. (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit. (c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.	Rule 335-3-16-.13(5)
14. Additional Rules and Regulations	
This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.	§22-28-16(d), Code of Alabama 1975, as amended

General Permit Provisos

Federally Enforceable Provisos	Regulations
15. <u>Equipment Maintenance or Breakdown</u>	
(a) In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:	Rule 335-3-1-.07(1),(2)
(1) Identification of the specific facility to be taken out of service as well as its location and permit number;	
(2) The expected length of time that the air pollution control equipment will be out of service;	
(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;	
(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;	
(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.	
(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.	
16. <u>Operation of Capture and Control Devices</u>	
All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.	§22-28-16(d), <u>Code of Alabama 1975</u>, as amended

General Permit Provisos

Federally Enforceable Provisos	Regulations
17. Obnoxious Odors	
This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.	Rule 335-3-1-.08
18. Fugitive Dust	
(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.	Rule 335-3-4-.02
(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:	
(1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; or	
(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; or	
(3) By paving; or	
(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions; or	
(5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.	
19. Additions and Revisions	
Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.	Rule 335-3-16-.13 and .14
20. Recordkeeping Requirements	
(a) Records of required monitoring information of the source shall include the following:	Rule 335-3-16-.05(c) 2.

Federally Enforceable Provisos	**Regulations**
(1) The date, place, and time of all sampling or measurements; (2) The date analyses were performed; (3) The company or entity that performed the analyses; (4) The analytical techniques or methods used; (5) The results of all analyses; and (6) The operating conditions that existed at the time of sampling or measurement. (b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.	
21. <u>Reporting Requirements</u> (a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9). (b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.	Rule 335-3-16-.05(c) 3.
22. <u>Emission Testing Requirements</u> Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised. The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and	Rule 335-3-1-.05(3) and Rule 335-3-1-.04(1)

Federally Enforceable Provisos	Regulations
regulations. To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:	
(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.	Rule 335-3-1-.04
(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).	
(c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.	
(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.	
23. Payment of Emission Fees	
Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.	Rule 335-1-7-.04
24. Other Reporting and Testing Requirements	
Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.	Rule 335-3-1-.04(1)
25. Title VI Requirements (Refrigerants)	
Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.	40 CFR Part 82
No person shall knowingly vent or otherwise release any Class I or	

Federally Enforceable Provisos	Regulations
Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F. The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.	
26. Chemical Accidental Prevention Provisions If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then: (a) The owner or operator shall comply with the provisions in 40 CFR Part 68. (b) The owner or operator shall submit one of the following: (1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or, (2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.	40 CFR Part 68
27. Display of Permit This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by any or all persons who may request to see it.	Rule 335-3-14-.01(1)(d)
28. Circumvention No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.	Rule 335-3-1-.10
29. Visible Emissions Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute	Rule 335-3-4-.01(1)

Federally Enforceable Provisos	Regulations
period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.	
30. Fuel-Burning Equipment	
Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03.	Rule 335-3-4-.03
Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.	Rule 335-3-5-.01
31. Process Industries – General	
Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.	Rule 335-3-4-.04
32. Averaging Time for Emission Limits	
Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.	Rule 335-3-1-.05
33. Compliance Assurance Monitoring (CAM)	
Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.	
(a) Operation of Approved Monitoring	40 CFR 64.7
(1) Commencement of operation. The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).	
(2) Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the	

Federally Enforceable Provisos	Regulations
monitoring equipment. (3) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (4) Response to excursions or exceedances. a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results,	

Federally Enforceable Provisos	Regulations
review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.	
(5) Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.	
(b) Quality Improvement Plan (QIP) Requirements	40 CFR 64.8
(1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.	
(2) Elements of a QIP:	
A. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.	
B. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:	

Federally Enforceable Provisos	Regulations
i. Improved preventive maintenance practices. ii. Process operation changes. iii. Appropriate improvements to control methods. iv. Other steps appropriate to correct control performance. v. More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above).	
(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.	
(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have: A. Failed to address the cause of the control device performance problems; or B. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.	
(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.	
(c) Reporting and Recordkeeping Requirements	40 CFR 64.9
(1) General reporting requirements A. On and after the date specified in Section 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin.	

Federally Enforceable Provisos	Regulations
Code R. 335-3-16-.05(c)3. B. A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code R. 335-3-16-.05(c)3. and the following information, as applicable: (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and (iii) A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. (2) General recordkeeping requirements. A. The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code R. 335-3-16-.05(c)2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). B. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping	

General Permit Provisos

Federally Enforceable Provisos	Regulations
requirements.	
(d) Savings Provisions	40 CFR 64.10
(1) Nothing in this part shall:	
A. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.	
B. Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but no limited to sections 114(a)(1) and 504(b), or state law, as applicable.	
C. Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.	

Summary Page for 90" ID Water Cooled Cupola Furnace (48 TPH) with ETA 2000 Baghouse (EP001)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
001	90" Cupola Furnace (48 tph)	PM	$17.31\ (P)^{0.16}$	335-3-4-.04
001	90" Cupola Furnace (48 tph)	PM	0.006 gr/dscf	40 CFR §63.7690(a)(2)
001	90" Cupola Furnace (48 tph)	CO	1300 °F @ 0.3 sec	335-3-7-.01
001	90" Cupola Furnace (48 tph)	Opacity	(see General Proviso No. 29)	SIP
001	90" Cupola Furnace (48 tph)	SO_2	N/A	N/A
001	90" Cupola Furnace (48 tph)	VOC	N/A	N/A
001	90" Cupola Furnace (48 tph)	Pb	N/A	N/A
001	90" Cupola Furnace (48 tph)	VOHAP	20 ppmv	40 CFR §63.7690(a)(8)

Provisos for 90" ID Water Cooled Cupola Furnace (48 TPH) with ETA 2000 Baghouse

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. For particulate matter emissions, this unit is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33. The monitoring required by 40 CFR 63 Subpart EEEEE, listed below in the Emission Monitoring Section, is sufficient monitoring to meet the requirements of 40 CFR Part 64.	40 CFR Part 64
3. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
4. This source is subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries.	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate matter (PM) emissions from the processing equipment shall not exceed that which is specified in General Proviso No. 31.	Rule 335-3-4-.04
2. Particulate matter emissions from the cupola furnace shall not exceed 0.006 gr/dscf or, alternatively, total metal hazardous air pollutants emissions shall not exceed 0.0005 gr/dscf.	40 CFR §63.7690 (a)(2) Subpart EEEEE
3. The cupola furnace must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.	40 CFR §63.7690 (a)(8) Subpart EEEEE
4. The facility must operate each combustion device applied to emissions from the cupola furnace such that the 15-minute average combustion zone temperature does not fall below 1,300 degrees Fahrenheit (°F). Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast conditions are not included in the 15-	40 CFR §63.7690 (b)(3) Subpart EEEEE

Federally Enforceable Provisos	Regulations
minute average.	
5. The facility shall comply with the scrap certification or scrap selection and inspection program specified in 40 CFR §63.7700.	40 CFR §63.7700 Subpart EEEEE
6. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
7. The facility must install, operate, and maintain a capture and collection system for sources subject to VOHAP emissions limit, in accordance with §63.7690 (b) (1).	40 CFR §63.7690 (b)(1) Subpart EEEEE
8. Each capture and collection system associated with these units must comply with the operation and maintenance requirements specified in 63.7710(a) and (b)(1)-(5).	40 CFR §63.7710(a) and (b)(1)-(5) Subpart EEEEE
9. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate matter emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 10 of 40 CFR Part 60, Appendix A shall be used in the determination of the carbon monoxide emissions.	Rule 335-3-1-.05
4. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
5. The facility must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are	40 CFR §63.7720(c) Subpart EEEEE

Federally Enforceable Provisos	Regulations
normal following startup of a cupola.	
6. The facility must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, and VOHAP emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7730 (a)&(b) Subpart EEEEE
7. To determine compliance with the applicable emissions limit for PM or total metal HAP in §63.7690(a)(2) for a cupola furnace, follow the test methods and procedures listed below: (a) Determine the concentration of PM or total metal HAP according to the test methods in 40 CFR part 60, appendix A, that are specified in 40 CFR §63.7732 (b)(1)(i) through (v) or 40 CFR §63.7732 (c)(1)(i) through (v) respectively. (b) Collect a minimum sample volume of 60 dscf of gas during each PM or total metal HAP sampling run. A minimum of three valid test runs are needed to comprise a performance test. (c) For cupola metal melting furnaces, sample only during times when the cupola is on blast.	40 CFR §63.7732 (b)&(c) Subpart EEEEE
8. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
9. To determine compliance with the applicable VOHAP emissions limit in §63.7690(a)(8) for a cupola metal melting furnace, follow the test methods and procedures in paragraphs (e)(1) through (4) of this section:	40 CFR §63.7732 (e) Subpart EEEEE

Federally Enforceable Provisos	Regulations
(1) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in 40 CFR §63.7732 (e)(1)(i) through (v). (2) Determine the average VOHAP, TGNMO, or TOC concentration using a minimum of three valid test runs. Each test run must include a minimum of 60 continuous operating minutes. (3) For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO, or TOC for oxygen content in the gas stream using Equation 1 of this section: $$C_{VOHAP,\,10\%O_2} = C_{VOHAP}\left(\frac{10.9\%}{20.9\% - \%O_2}\right) \qquad (Eq.\ 1)$$ Where: C_{VOHAP}= Concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A; and $\%O_2$= Oxygen concentration in gas stream, percent by volume (dry basis). (4) For a cupola metal melting furnace, measure the combustion zone temperature of the combustion device with the CPMS required in §63.7740(d) during each sampling run in 15-minute intervals. Determine and record the 15-minute average of the three runs.	
10. The facility must comply with the applicable requirement for establishing operating limits as specified in 63.7733(a).	40 CFR §63.7733 (a) Subpart EEEEE

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. A normal operating range of total combustion tuyere airflow to the 90" Cupola Furnace shall be established by the facility and shall be monitored and recorded continuously.	Rule 335-3-16-.05 40 CFR 64
2. For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain a CPMS according to the requirements in §63.7741(a) and the following requirements: (1) If you use a flow measurement device to monitor the operating limit parameter, you must at all times monitor the hourly average rate (*e.g.,* the hourly average actual volumetric flow rate through each separately ducted hood or the average hourly total volumetric flow rate at the inlet to the control device). (2) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.	40 CFR §63.7740(a) Subpart EEEEE 40 CFR 64
3. For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the following requirements: (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual. (2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms. (3) Check the compressed air supply for pulse-jet baghouses each day.	40 CFR §63.7740(b) Subpart EEEEE 40 CFR 64

Federally Enforceable Provisos	Regulations
(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology. (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means. (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices. (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks. (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.	
4. For each combustion device subject to the operating limit in §63.7690(b)(3), you must at all times monitor the 15-minute average combustion zone temperature using a CPMS according to the requirements of §63.7741(d).	40 CFR §63.7740(d) Subpart EEEEE 40 CFR 64
5. For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain each CPMS according to the following requirements: (1) If you use a flow measurement device to monitor an operating limit parameter for a capture system, you must meet the following requirements: (i) Locate the flow sensor and other necessary equipment such as straightening vanes in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances. (ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate. (iii) Conduct a flow sensor calibration check at least	40 CFR §63.7741(a) Subpart EEEEE 40 CFR 64

Federally Enforceable Provisos	Regulations
semiannually. (iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage. (2) If you use a pressure measurement device to monitor the operating limit parameter for a capture system, you must meet the following requirements: (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion (ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range. (iii) Check the pressure tap for pluggage daily. (iv) Using a manometer, check gauge calibration quarterly and transducer calibration monthly. (v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor. (vi) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage. (3) Record the results of each inspection, calibration, and validation check.	
6. You must install, operate, and maintain a bag leak detection system according to the following requirements: (1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.	40 CFR §63.7741(b) Subpart EEEEE 40 CFR 64

Federally Enforceable Provisos	Regulations
(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger). (3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel. (4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable). (5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b). (6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber. (7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.	
7. For each combustion device subject to the operating limit in §63.7690(b)(3) or (4), you must install and maintain a CPMS to measure and record the combustion zone temperature according to the following requirements: (1) Locate the temperature sensor in a position that provides a representative temperature.	40 CFR §63.7741(d) Subpart EEEEE 40 CFR 64

Federally Enforceable Provisos	Regulations
(2) For a non-cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 0.75 percent of the temperature value, whichever is larger. (3) For a cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 2 percent of the temperature value, whichever is larger. (4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants. (5) If you use a chart recorder, it must have a sensitivity in the minor division of at least 20 °F. (6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 °C of the process temperature sensor's reading. (7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor. (8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.	
8. You must operate each CPMS used to meet the requirements of this subpart according to the following requirements: (1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of three of the required four data points to constitute a valid hour of data. (2) Each CPMS must have valid hourly data for 100 percent of every averaging period.	40 CFR §63.7741(f) Subpart EEEEE 40 CFR 64

Federally Enforceable Provisos	Regulations
(3) Each CPMS must determine and record the hourly average of all recorded readings and the 3-hour average of all recorded readings.	
9. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.	40 CFR §63.7742(a) Subpart EEEEE 40 CFR 64
10. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.	40 CFR §63.7742(b) Subpart EEEEE 40 CFR 64
Recordkeeping and Reporting Requirements	
1. The facility shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05 40 CFR 64
2. The facility shall maintain records of the total combustion rate of the cupola. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05
3. Records of iron production shall be kept in a form suitable for inspection for a period of at least five (5) years following the production of the iron.	Rule 335-3-16-.05
4. The facility shall record the amount of coke and the sulfur content of the coke used monthly and 12-month rolling for the 90" Cupola Furnace in a form suitable for inspection. Records of these analyses shall be maintained for a period of 5 years from the sample date and be readily available for inspection.	Rule 335-3-16-.05
5. Unless a different schedule is approved by the Department, the facility must submit a compliance report semiannually according to the dates specified in 63.7751 (a). Each compliance report must include the following	40 CFR §63.7751 (a & b) Subpart EEEEE

Federally Enforceable Provisos	Regulations
information: (1) Company name and address (2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report (3) Date of report and beginning and ending dates of the reporting period (4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i) (5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period (6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period (7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified below. This requirement includes periods of startup, shutdown, and malfunction (i) The total operating time of each emissions source during the reporting period. (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken. (8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are	40 CFR 64

Federally Enforceable Provisos	Regulations
using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified below. This requirement includes periods of startup, shutdown, and malfunction. (i) The date and time that each malfunction started and stopped. (ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks. (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8). (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period. (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes. (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period. (viii) A brief description of the process units. (ix) A brief description of the continuous monitoring system. (x) The date of the latest continuous monitoring	

Federally Enforceable Provisos	Regulations
system certification or audit. (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.	
6. Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).	40 CFR §63.7751 (c) Subpart EEEEE 40 CFR 64

Summary Page for Ductile Iron Production with Capture Hood and ETA Baghouse (EP002)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
002	Ductile Iron Production with Capture Hood and ETA Baghouse	PM	The lesser of 16 TPY or the allowable set by $3.59(P)^{0.62}$	335-3-4-.04 Anti-PSD 335-3-14-.04
002	Ductile Iron Production with Capture Hood and ETA Baghouse	PM	*91,400 tons of gray iron treated per year or per 12-months	Anti-PSD 335-3-14-.04
002	Ductile Iron Production with Capture Hood and ETA Baghouse	Opacity	(see general proviso 29)	335-3-4-.01

Gray iron treated to produce ductile iron shall not exceed 91,400 tons per year or per 12-months.

Provisos for Ductile Iron Production with Capture Hood and ETA Baghouse

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. The Ductile Iron Treatment Process has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti – PSD)
3. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
4. This source is subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate matter emissions from the Ductile Iron Treatment shall not exceed the lesser of the Anti-PSD limit of 16.0 TPY and the allowable as set by Rule 335-3-4-.04.	Rule 335-3-4-.04 Rule 335-3-14-.04 (Anti – PSD)
2. The amount of gray iron treated to produce ductile iron shall not exceed 91,400 tons per year in any 12-month period.	Rule 335-3-14-.04(8)
3. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
4. Visible emissions (VE) this unit shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR (latest edition) Part 60, Appendix A shall be used in the determination of particulate matter emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR (latest edition) Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731(b) Subpart EEEEE
5. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
Emission Monitoring	
1. The facility shall perform a visual check, once per day, of the baghouse associated with this unit. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions estimated in excess of 10% opacity are noted are not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.	Rule 335-3-16-.05
2. The facility shall establish a normal operating pressure drop range and shall monitor and record the pressure drop across the baghouse once per day.	Rule 335-3-16-.05
3. Once per day, the facility shall check the ductile capture hood for fugitive emissions and emissions capture. Any repairs or observed problems shall be recorded.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
4. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731(b) Subpart EEEEE
5. The facility shall perform a weekly inspection of the baghouse to verify proper operation. The following activities shall be performed. (a) Once per week check hopper, fan and cleaning cycle for proper operation. (b) Once per week a visual check of all hoods and ductwork. (c) Record any repairs or observed problems.	Rule 335-3-16-.05
6. The facility shall perform an annual inspection of the baghouse to verify proper operation. The following activities shall be performed. (a) Once per year inspect baghouse structure, access doors, door seals, and bags. (b) Once per year perform an internal inspection of the baghouse hoppers.	Rule 335-3-16-.05
7. The facility must comply with the applicable monitoring requirements specified in 40 CFR § 63.7740 (a & b), 40 CFR § 63.7741 (a & b), and 40 CFR § 63.7742 (a-c) as applicable.	40 CFR § 63.7740 (a & b), 40 CFR § 63.7741 (a & b), and 40 CFR § 63.7742 (a-c)
Recordkeeping and Reporting Requirements	
1. The facility shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05
2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a logbook.	Rule 335-3-16-.05
3. Records showing the monthly and rolling 12-month total of ductile iron produced shall be kept in a form suitable for inspection for a period of at least five (5) years following the production of the ductile iron.	Rule 335-3-14-.04

Federally Enforceable Provisos	Regulations
4. The facility shall maintain a record of the pressure drop across the baghouse required under "Emission Monitoring". This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05
5. The facility must comply with the applicable notifications, reports, and records requirements specified in 40 CFR § 63.7750, 40 CFR § 63.7751 (a-d), 40 CFR § 63.7752 (a-c) and 40 CFR § 63.7753 (a-c) as applicable.	40 CFR § 63.7750, 40 CFR § 63.7751 (a-d), 40 CFR § 63.7752 (a-c) and 40 CFR § 63.7753 (a-c)

Summary Page for Disa Finishing; One (1) Disa Wheelabrator Shotblast, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Grinding Stations and Sand Silos with Shared Baghouse (EP007)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
007	One (1) Disa Wheelabrator, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and Sand Silos	PM	$3.59(P)^{0.62}$	335-3-4-.04
007	One (1) Disa Wheelabrator, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and Sand Silos	PM	8.7 lb/hr *	335-3-14-.04 (Anti-PSD)
007	One (1) Disa Wheelabrator, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and Sand Silos	Opacity	(see general proviso 28)	335-3-4-.01

Note: The One (1) Disa Line Wheelabrator, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Disa Grinding Stations and the Sand Silos share a combined particulate limit of 8.7 lb/hr out of the shared baghouse stack (EP007).

Provisos for Disa Finishing; One (1) Disa Wheelabrator Shotblast, Two (2) Wheelabrator Shotblasts, One (1) Boading Spencer Shotblast, Seven (7) Grinding Stations and Sand Silos with Shared Baghouse

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
2. The Disa Wheelabrator Shotblast, Two Wheelabrator Shotblasts, One Boading Spencer Shotblast, Seven Disa Grinding Stations and the Sand Silos share an enforceable limit in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. For particulate matter emissions, the four Shotblasts are subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33.	40 CFR Part 64
4. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
5. These sources are subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate emissions from The Disa Wheelabrator Shotblast, Two Wheelabrator Shotblasts, One Boading Spencer Shotblast, Seven Disa Grinding Stations and the Sand Silos with Shared Baghouse shall not exceed the lesser of the Anti-PSD combined particulate limit of 8.7 lb/hr out of the baghouse stack or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04(8) (Anti-PSD)
2. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE

Federally Enforceable Provisos	Regulations
3. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
Emission Monitoring	
1. Reference the Appendix - Table 4 for the monitoring requirements for 40 CFR Part 64, "Compliance Assurance Monitoring".	40 CFR Part 64
2. Reference the Appendix - Table 4 for the monitoring requirements for the Seven (7) Disa Grinding Stations.	Rule 335-3-16-.05
3. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months	40 CFR §63.7731(b) Subpart EEEEE
Recordkeeping and Reporting Requirements	
1. Reference the Appendix - Table 4 for the recordkeeping and reporting requirements for 40 CFR Part 64, "Compliance Assurance Monitoring".	40 CFR Part 64

Federally Enforceable Provisos	Regulations
2. Reference the Appendix - Table 4 for the recordkeeping and reporting requirements for the Seven (7) Disa Grinding Stations.	Rule 335-3-16-.05
3. The facility shall maintain records of the hours of operation of the after-filter, to include the date and time of the after-filter operation. Each record shall be maintained for a period of 5 years	Rule 335-3-16-.05 40 CFR 64
4. The facility shall establish a normal operating pressure range for the after-filter and shall monitor and record the pressure drop across the after-filter when in operation. Records shall be maintained for 5 years.	Rule 335-3-16-.05 40 CFR 64

Summary Page for Disamatic Mold Line and Sand Recycling System with Baghouse (EP006)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
006	Disamatic Mold Line, Shakeout, Pouring & Cooling, and Sand Recycling System	PM	$3.59(P)^{0.62}$	335-3-4-.04
006	Disamatic Mold Line, Shakeout, Pouring & Cooling, and Sand Recycling System	PM	9.5 lb/hr	335-3-14-.04 (Anti-PSD)
006	Disa Pouring Stations	PM	0.010 gr/dscf	§63.7690(a)(5)
006	Disamatic Mold Line, Shakeout, Pouring & Cooling, and Sand Recycling System	Opacity	(see general proviso 29)	335-3-4-.01

Provisos for Disamatic Mold Line and Sand Recycling System with Baghouse (EP006)

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
2. The Disamatic Mold Line (250C Mold Unit, Shakeout, Pouring/Cooling, & Sand System) have an enforceable limit in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. For particulate matter emissions, the molding line is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33.	40 CFR Part 64
4. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
5. The pouring stations are subject to and must comply with the applicable requirement of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate emissions from this system shall not exceed the lesser of the Anti-PSD combined particulate limit of 9.5 lb/hr out of the baghouse stack or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04(8) (Anti-PSD)
2. This system shall not operate more than 4,750 hours in any consecutive twelve month period.	Rule 335-3-14-.04(8) (Anti-PSD)
3. Particulate matter emissions from each pouring stations shall not exceed 0.010 gr/dscf or, alternatively, total metal hazardous air pollutants emissions shall not exceed 0.0008 gr/dscf.	40 CFR §63.7690 (a)(5) Subpart EEEEE

Federally Enforceable Provisos	Regulations
4. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
5. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. The facility must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).	40 CFR §63.7720(c) Subpart EEEEE
5. To determine compliance with the applicable emissions limit for PM or total metal HAP in §63.7690(a)(2) for a pouring stations, follow the test methods and procedures listed below: (1) Determine the concentration of PM or total metal HAP according to the test methods in 40 CFR part 60, appendix A as specified in 40 CFR §63.7732(b)(1)(i) through (v) or 40 CFR §63.7732(c)(1)(i) through (v). a. Collect a minimum sample volume of 60 dscf of gas during each PM or total metal HAP sampling run. A minimum of three valid test runs are needed to comprise a performance test.	40 CFR §63.7732 (b)&(c) Subpart EEEEE
6. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE

Federally Enforceable Provisos	Regulations
7. The facility must comply with the applicable requirement for establishing operating limits as specified in 63.7733(a).	40 CFR §63.7733 (a) Subpart EEEEE
Emission Monitoring	
1. Reference the Appendix-Table 4 for the monitoring requirements for 40 CFR Part 64, "Compliance Assurance Monitoring".	40 CFR Part 64
2. The capture system associated with the pouring stations must comply with the operation and maintenance requirements specified in 40 CFR §63.7710(a), (b)(1), and (b)(3)-(6).	40 CFR §63.7710 (a), (b) (1), and (b)(3)-(6) Subpart EEEEE
3. For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the following requirements:	40 CFR §63.7740(b) Subpart EEEEE 40 CFR 64
(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.	
(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.	
(3) Check the compressed air supply for pulse-jet baghouses each day.	
(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.	
(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.	
(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.	
(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.	

Federally Enforceable Provisos	Regulations
(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.	
4. The facility must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731 (a)&(b) Subpart EEEEE
Recordkeeping and Reporting Requirements	
1. Reference the Appendix-Table 4 for the recordkeeping and reporting for 40 CFR Part 64, "Compliance Assurance Monitoring".	40 CFR Part 64
2. The facility must keep records showing monthly and 12-month rolling total of hours of operation. The records shall be kept in a form suitable for inspection.	Rule 335-3-16-.05
3. Unless a different schedule is approved by the Department, the facility must submit a compliance report semi-annually according to the dates specified in 63.7751 (a). Each compliance report must include the following information:	40 CFR §63.7751 (a & b) Subpart EEEEE 40 CFR 64
(1) Company name and address	
(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report	
(3) Date of report and beginning and ending dates of the reporting period	
(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i)	

Federally Enforceable Provisos	Regulations
(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period (6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period (7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified below. This requirement includes periods of startup, shutdown, and malfunction (i) The total operating time of each emissions source during the reporting period. (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken. (8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified below. This requirement includes periods of startup, shutdown, and malfunction. (i) The date and time that each malfunction started and stopped. (ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks. (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8). (iv) The date and time that each deviation started and	

Federally Enforceable Provisos	Regulations
stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period. (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes. (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period. (viii) A brief description of the process units. (ix) A brief description of the continuous monitoring system. (x) The date of the latest continuous monitoring system certification or audit. (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.	
4. Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).	40 CFR §63.7751 (c) Subpart EEEEE 40 CFR 64

Summary Page for GFD Mold Production, Casting Production, and Sand Recycling System with Baghouse (005)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
005	GFD Mold Production, Casting Production, and Sand Recycling System with Baghouse	PM	The lesser of 5.0 lbs/hr or the allowable set by $3.59P^{0.62}$	335-3-4-.04 (Anti-PSD) 335-3-14-.04
005	GFD Mold Production, Casting Production, and Sand Recycling System with Baghouse	Opacity	(see general proviso 29)	335-3-4-.01

Provisos for GFD Mold Production, Casting Production, and Sand Recycling System with Baghouse

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. The unit has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. For particulate matter emissions, this unit is subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33.	40 CFR Part 64
4. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
5. This source is subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries.	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 5.0 lbs/hr or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-4-.04 Rule 335-3-14-.04 (Anti-PSD)
2. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
3. Visible emissions (VE) this unit shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate matter emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. The facility must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).	40 CFR §63.7720(c) Subpart EEEEE
5. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
Emission Monitoring	
1. Reference the Appendix-Table 3 for the monitoring requirements for 40 CFR Part 64, “Compliance Assurance Monitoring”.	40 CFR Part 64
2. The Facility must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731(b) Subpart EEEEE
Recordkeeping and Reporting Requirements	
1. Reference the Appendix-Table 3 for the recordkeeping and reporting for 40 CFR Part 64, “Compliance Assurance Monitoring”.	40 CFR Part 64

Summary Page for No-Bake Mold Process (EP004)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
004	No-Bake Mold Line, Shakeout, Auto and Sidefloor Moldmaking (2 mixers) Pouring & Cooling	PM	$3.59(P)^{0.62}$	335-3-4-.04
004	No-Bake Mold Line, Shakeout, Auto and Sidefloor Moldmaking (2 mixers) Pouring & Cooling	PM	9.5 lb/hr	335-3-14-.04 (Anti-PSD)
004	Auto Pouring Stations	PM	0.010 gr/dscf Or 0.0008gr/dscf Metal HAPs	40 CFR §63.7690 (a)(5)
004	No-Bake Mold Line, Shakeout, Auto and Sidefloor Moldmaking (2 mixers) Pouring & Cooling	Opacity	(see general proviso 28)	335-3-4-.01
020	Sand Reclamation and Preparation (H-20)	PM	8.7 lb/hr	335-3-14-.04 (Anti-PSD)
FUG-004	Auto Line and Sidefloor Dryers	PM	N/A	N/A
FUG-004	Sidefloor Pouring	PM	N/A	N/A

Provisos for No-Bake Mold Process

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
2. The unit has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
4. The pouring stations are subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate matter emissions from each pouring stations shall not exceed 0.010 gr/dscf or, alternatively, metal hazardous air pollutants emissions shall not exceed 0.0008 gr/dscf.	40 CFR §63.7690 (a)(5) Subpart EEEEE
2. Particulate matter emissions from the No-Bake Mold Line, Shakeout, Auto and Sidefloor Moldmaking (2 Mixers) and the Pouring line Combined shall not exceed the lesser of the Anti-PSD limit of 9.5 lbs/hr or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04 (Anti-PSD)
3. Particulate matter emissions from the Sand Reclamation and Preparation System shall not exceed the lesser of the Anti-PSD limit of 8.7 lbs/hr or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04 (Anti-PSD)
4. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
5. Visible emissions (VE) this unit shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4.01

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. The facility must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).	40 CFR §63.7720(c) Subpart EEEEE
5. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
Emission Monitoring	
1. The facility must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731 (a)&(b) Subpart EEEEE
2. Tyler Union Foundry Company shall perform a visual check, once per day, of the baghouse stack associated with this unit. This check shall be performed by a person familiar with Method 9. If estimated instantaneous visible emissions in excess of 10% opacity are observed, and are not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
3. Tyler Union Foundry Company shall establish a normal pressure operating range and shall monitor and record the pressure drop across the baghouses once per day.	Rule 335-3-16-.05
4. Tyler Union Foundry Company shall perform a weekly inspection of the baghouses to verify proper operation. The following activities shall be performed. (a) Once per week check hopper, fan and cleaning cycle for proper operation. (b) Once per week a visual check of all hoods and ductwork	Rule 335-3-16-.05
5. Tyler Union Foundry Company shall perform an annual inspection of the baghouses to verify proper operation. The following activities shall be performed. (a) Once per year inspect baghouse structure, access doors, door seals, and bags. (b) Once per year perform an internal inspection of the baghouse hoppers.	Rule 335-3-16-.05
6. The facility must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in §63.7690 (a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in the following: (a) Monthly inspections of the equipment that is important to the performance of the total capture system (*i.e.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.	40 CFR §63.7710(b) Subpart EEEEE

Federally Enforceable Provisos	Regulations
(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to: volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. Any parameter for damper position setting may be used that indicates the duct damper position related to the fully open setting. (ii) For each operating limit parameter selected in paragraph (b)(2)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate (*i.e.,* the operating limits with one furnace melting, two melting, as applicable to your plant). (iii) Include documentation in your plan to support your selection of the operating limits established for your capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7740(a), and the data used to set the value or setting for the parameter for each of your process configurations.	

Federally Enforceable Provisos	Regulations
(b) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. (c) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in the following: (i) Installation of the bag leak detection system. (ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established. (iii) Operation of the bag leak detection system including quality assurance procedures. (iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list. (v) How the bag leak detection system output will be recorded and stored (d) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to: (i) Sealing off defective bags or filter media.	

Federally Enforceable Provisos	Regulations
(ii) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions. (iii) Replacing defective bags or filter media or otherwise repairing the control device. (iv) Sealing off a defective baghouse compartment. (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system. (vi) Making process changes. (vii) Shutting down the process producing the PM emissions. (e) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination: (i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and (ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.	

Federally Enforceable Provisos	Regulations
7. For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the following requirements: (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual. (2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms. (3) Check the compressed air supply for pulse-jet baghouses each day. (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology. (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means. (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices. (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks. (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.	40 CFR §63.7740(b) Subpart EEEEE

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Tyler Union Foundry Company shall maintain a record of all inspections, to include visible observations and Method 9's performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05
2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a logbook.	Rule 335-3-16-.05
3. The facility must keep records showing monthly and 12-month rolling total of hours of operation. The records shall be kept in a form suitable for inspection.	Rule 335-3-16-.05
4. Unless a different schedule is approved by the Department, the facility must submit a compliance report semiannually according to the dates specified in 63.7751 (a). Each compliance report must include the following information: (1) Company name and address (2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report (3) Date of report and beginning and ending dates of the reporting period (4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). (5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.	40 CFR §63.7751 (a & b) Subpart EEEEE

Federally Enforceable Provisos	Regulations
(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period. (7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified below. This requirement includes periods of startup, shutdown, and malfunction. (i) The total operating time of each emissions source during the reporting period. (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken. (8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified below. This requirement includes periods of startup, shutdown, and malfunction. (i) The date and time that each malfunction started and stopped. (ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks. (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8). (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or	

Federally Enforceable Provisos	Regulations
malfunction or during another period. (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period. (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes. (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period. (viii) A brief description of the process units. (ix) A brief description of the continuous monitoring system. (x) The date of the latest continuous monitoring system certification or audit. (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.	
5. Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).	40 CFR §63.7751 (c) Subpart EEEEE

Summary Page for Core Making Process

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
010	Disamatic core machine, L-40, L-50, L-70	PM	$3.59(P)^{0.62}$	335-3-4-.04
010	Disamatic core machine, L-40, L-50, L-70	Opacity	(see general proviso 29)	335-3-4-.01
011	BMD core machine, L-120	PM	$3.59(P)^{0.62}$	335-3-4-.04
011	BMD core machine, L-120	Opacity	(see general proviso 29)	335-3-4-.01
012	GFD core machines, L-200	PM	$3.59(P)^{0.62}$	335-3-4-.04
012	GFD core machines, L-200	Opacity	(see general proviso 29)	335-3-4-.01

Provisos for Core Machines with Packed Bed Scrubbers

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
Emission Standards	
1. All combined particulate emissions from all Core Machines (separate stacks) shall not exceed the allowable as set by Rule 335-3-4-.04.	Rule 335-3-4-.04
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 25A or Method 18, Part 60, Appendix A shall be used in the determination of VOC and HAP emissions from the stack.	Rule 335-3-1-.05
Emission Monitoring	
1. Tyler Union Foundry Company shall establish a normal operating pressure range and shall monitor and record the scrubber column differential pressure once per day. (a) The column differential pressure shall be in the range of 0.1 – 2.5 inches of water.	Rule 335-3-16-.05
2. Tyler Union Foundry Company shall perform a weekly inspection of the packed bed scrubbers to verify proper operation. The following activities shall be performed. (a) Once per week a visual check of the scrubber, blower, and scrubbing solution pump for proper operation. (b) Once per week a visual check of all hoods and ductwork.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
3. Tyler Union Foundry Company shall perform an annual inspection of the packed bed scrubbers to verify proper operation. The following activities shall be performed. (a) Once per year inspect scrubber structure, access doors, door seals. (b) Once per year perform an internal inspection of the scrubber column packing, scrubber blower, and scrubber solution pump.	Rule 335-3-16-.05
Recordkeeping and Reporting Requirements	
1. Tyler Union Foundry Company shall maintain a record of all inspections, to include visible observations and Method 9's performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05
2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a logbook.	Rule 335-3-16-.05
3. Tyler Union Foundry Company shall keep accurate and understandable records of pH and column differential pressure which records at least the last five years of data. The data will be maintained in a form suitable for inspection and be available upon request.	Rule 335-3-16-.05(c)

Summary Page for Cupola Dust Treatment Silo with Bin Vent

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
015	Cupola Dust Treatment Silo with Bin Vent	PM	The lesser of 0.80 lbs/hr or the allowable set by $3.59(P)^{0.62}$	335-3-4-.04 or 335-3-14-.04 (Anti-PSD)
015	Cupola Dust Treatment Silo with Bin Vent	Opacity	(see general proviso 29)	335-3-4-.01

Provisos for Cupola Dust Treatment Silo with Bin Vent

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
2. This unit has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
Emission Standards	
1. Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 0.80 lb/hr or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04 (Anti-PSD)
2. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
Emission Monitoring	
1. The facility shall perform a visual check, weekly and during loading of the silo, of the bin vent associated with this unit. This check shall be performed by a person familiar with Method 9. If instantaneous visible emissions in excess of 10% opacity are observed, and are not corrected within a period of 15 minutes, then a Method 9 must be performed within 1 hour of the observations. Maintenance shall be performed as needed. Any repairs or observed problems shall be recorded.	Rule 335-3-16-.05
Recordkeeping and Reporting Requirements	
1. The facility shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a form suitable for inspection.	Rule 335-3-16-.05

Summary Page for 150/300 Core Making Building

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
016	150/300 Core Making Building	PM	The lesser of 0.40 lbs/hr or the allowable set by $3.59P^{0.62}$	335-3-4-.04 or 335-3-14-.04 (Anti-PSD)
016	150/300 Core Making Building	Opacity	(see general proviso 29)	335-3-4-.01
005	150/300 Air Set Machines	PM	N/A	N/A

Provisos for 150/300 Core Making Building

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. The unit has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
Emission Standards	
1. Particulate matter emissions from this unit shall not exceed the lesser of the Anti-PSD limit of 0.40 lbs/hr or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-4-.04 Rule 335-3-14-.04 (Anti-PSD)
2. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate matter emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
Recordkeeping and Reporting Requirements	
1. The facility shall maintain a record of all inspections, to include visible observations and Method 9 observations performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
2. If a visible emission observation is required using the 40 CFR, Part 60, Appendix A, Method 9, the results will be documented using an ADEM visible emissions observation report and the cause and corrective action taken will be documented in a form suitable for inspection.	Rule 335-3-16-.05

Summary Page for GFD Line Two (2) Wheelabrator Shotblasts (15 TPH, each), One (1) Pangborn Shotblast and Eight (8) GFD Grinding Stations with shared Baghouse (EP003)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
003	Two (2) Wheelabrator Shotblasts (15 TPH, each) and One (1) Pangborn Shotblast with Baghouse	PM	The lesser of 14.5 TPY and 0.34 lbs/ ton of castings Pangborns and 14.5 TPY and 0.17 lbs/ ton of castings Wheelabrator or the allowable set by $3.59(P)^{0.62}$	SIP 335-3-4-.04 335-3-14-.04 (Anti-PSD)
003	Two (2) Wheelabrator Shotblasts (15 TPH, each) and One (1) Pangborn Shotblast with Baghouse	PM	*84,972 tons of castings per year and **169,944 tons of castings per year	335-3-14-.04 (Anti-PSD)
003	(8) GFD Grinding Stations with Baghouse	PM	$3.59(P)^{0.62}$	335-3-4-.04
003	(8) GFD Grinding Stations with Baghouse	PM	5.0 lb/hr	335-3-14-.04 (Anti-PSD)
003	Two (2) Wheelabrator Shotblasts (15 TPH, each) and One (1) Pangborn Shotblast with Baghouse	Opacity	(see general proviso 29)	335-4-.01

The amount of castings processed through the Two Pangborn Shotblasts shall not exceed 84,972 tons per year in any 12-month period.

****The amount of castings processed through the One Wheelabrator Shotblast shall not exceed 169,944 tons per year in any 12-month period.***

Note: The Eight grinding stations share a combined particulate limit of 5.0 lb/hr out of the shared baghouse stack.

Provisos for GFD Line Two (2) Wheelabrator Shotblasts (15 TPH, each), One (1) Pangborn Shotblast and Eight (8) GFD Grinding Stations with shared Baghouse (EP003)

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03 "Major Source Operating Permits."	Rule 335-3-16-.03
2. The Two (2) Wheelabrator Shotblasts, One (1) Pangborn Shotblast and Eight (8) Grinding Stations have an enforceable limit in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. For particulate matter emissions, the Two (2) Wheelabrator Shotblasts and the One (1) Pangborn Shotblast units are subject to the applicable requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", to include General Proviso # 33.	40 CFR Part 64
4. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 1 of 40 CFR Part 63 Subpart EEEEE.	40 CFR Part 63 Subpart A
5. These sources are subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries.	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. Particulate matter emissions from the Two (2) Wheelabrator Shotblasts shall not exceed the lesser of the Anti-PSD limit of 14.5 TPY and 0.34 lbs per ton of castings or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04 (Anti-PSD)
2. Particulate matter emissions from the One (1) Pangborn Shotblast shall not exceed the lesser of the Anti-PSD limit of 14.5 TPY and 0.17 lbs per ton of castings or the allowable as set by Rule 335-3-4-.04.	Rule 335-3-14-.04 (Anti-PSD)

Federally Enforceable Provisos	Regulations
3. Particulate matter emissions from the Eight (8) GFD Grinding Stations shall not exceed the lesser of the Anti-PSD limit of 5.0 lb/hr (21.9 tpy) or the allowable as set by Rule 335-3-4-.04	Rule 335-3-14-.04 (Anti-PSD)
4. The total amount of castings processed through the Two (2) Wheelabrator Shotblasts and the One (1) Pangborn Shotblast shall not exceed 84,972 tons per year and 169,944 tons per year respectively, in any 12-month period.	Rule 335-3-14-.04 (Anti-PSD)
5. Each building or structure housing any emissions source at an iron and steel foundry shall not discharge fugitive emissions with opacity greater than 20 percent (6-minute average), except one 6-minute average per hour that does not exceed 27 percent opacity.	40 CFR §63.7690 (a)(7) Subpart EEEEE
6. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	Rule 335-3-4-.01
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. The facility must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.	40 CFR §63.7720(a) Subpart EEEEE
4. To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you must (1) use a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and (2) conduct each test such that the opacity observations overlap with the PM performance tests.	40 CFR §63.7732 (d) Subpart EEEEE
Emission Monitoring	
1. Reference the Appendix-Table 1 for the monitoring requirements of for 40 CFR Part 64, "Compliance Assurance Monitoring" for the Two (2) Pangborn Shotblasts and the One (1) Wheelabrator Shotblast	40 CFR Part 64
2. Reference the Appendix-Table 1 for the monitoring	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
requirements for the Eight (8) GFD Grinding Stations.	
3. You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.	40 CFR §63.7731(b) Subpart EEEEE
Recordkeeping and Reporting Requirements	
1. Reference the Appendix-Table 1 for the recordkeeping and reporting requirements for 40 CFR Part 64, "Compliance Assurance Monitoring" for the Two (2) Wheelabrator Shotblasts and the One (1) Pangborn Shotblast	40 CFR Part 64
2. Reference the Appendix-Table 1 for the recordkeeping and reporting requirements for the Eight (8) GFD Grinding Stations.	Rule 335-3-16-.05
3. Records showing the monthly and rolling 12-month total of castings processed through the shotblasts shall be kept in a form suitable for inspection for a period of at least five (5) years following the processing of the casting. Records must reflect the types and amounts of castings through the shotblasts.	Rule 335-3-16-.05

Summary Page for Coating Operations to include; Two (2) Spray Paint Booths Three (3) Dip Lines and One (1) Touch-up Spray Booth

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
EP-013A	Paint Spray Booth (OCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	VOC	37 TPY	335-3-14-.04 (Anti-PSD)
EP-013A	Paint Spray Booth (OCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	HAP	2.6 lb/gal solids	§63.3890 (b)(1)
EP-013A	Paint Spray Booth (OCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	Opacity	(see general proviso 29)	SIP
EP-014A	Paint Spray Booth (NCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	VOC	37 TPY	335-3-14-.04 (Anti-PSD)
EP-014A	Paint Spray Booth (NCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	HAP	2.6 lb/gal solids	§63.3890 (b)(1)
EP-014A	Paint Spray Booth (NCL) (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	Opacity	(see general proviso 29)	SIP
EP-015A	Touch Up Spray Paint Booth	VOC	N/A	N/A
EP-015A	Touch Up Spray Paint Booth	HAP	2.6 lb/gal solids	§63.3890 (b)(1)

EP-015A	Touch Up Spray Paint Booth	Opacity	(see general proviso 29)	SIP
EP-013B	Disa Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	VOC	37 TPY	335-3-14-.04 (Anti-PSD)
EP-013B	Disa Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	HAP	2.6 lb/gal solids	§63.3890 (b)(1)
EP-014B	Disa Gland Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	VOC	37 TPY	335-3-14-.04 (Anti-PSD)
EP-014B	Disa Gland Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	HAP	2.6 lb/gal solids	§63.3890 (b)(1)
EP-015B	GFD Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	VOC	37 TPY	335-3-14-.04 (Anti-PSD)
EP-015B	GFD Dip Line (Water Based Asphalt Emulsion or Solvent-Based Asphalt Cutback Coatings)	HAP	2.6 lb/gal solids	§63.3890 (b)(1)

Provisos for Coating Operations; Two (2) Spray Booths, Three (3) Dip Lines and One (1) Touch-up Spray Booth

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. The unit has an enforceable limit in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, Air Permits Authorizing Construction in Clean Air Areas (Prevention of Significant Deterioration)".	Rule 335-3-14-.04 (Anti-PSD)
3. The facility is subject to the applicable requirements of 40 CFR Part 63 Subpart A, "General Provisions", as specified in Table 2 of 40 CFR Part 63 Subpart MMMM.	40 CFR Part 63 Subpart A
4. This source is subject to and must comply with the applicable requirements of 40 CFR Part 63 Subpart MMMM, "National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products".	40 CFR Part 63 Subpart MMMM
Emission Standards	
1. Volatile organic compound emissions from this unit shall not exceed the Anti-PSD limit of 37 tons per year.	Rule 335-3-14-.04 (Anti-PSD)
2. The Coating Operations must limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.	40 CFR 63.3890 (b)(1) Subpart MMMM
3. For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.	40 CFR 63.3892 (a) Subpart MMMM

Federally Enforceable Provisos	Regulations
4. For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.3961(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in §63.3967. You must meet the operating limits at all times after you establish them.	40 CFR 63.3892 (b) Subpart MMMM
5. For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.	40 CFR 63.3893 (a) Subpart MMMM
6. If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in following are implemented: (a) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers. (b) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized. (c) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes. (d) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.	40 CFR 63.3893 (b) Subpart MMMM

Federally Enforceable Provisos	Regulations
(e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.	
Compliance and Performance Test Methods and Procedures	
1. Method 24 of 40 CFR Part 60, Appendix A shall be used in the determination of volatile organic compound emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of the opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 311, as defined in 40 CFR 63, Appendix A shall be used in the determination of the hazardous air pollutants.	Rule 335-3-1-.05
4. To demonstrate compliance with the emissions limit specified in 63.3890, the facility must use at least one of three compliance options listed in 63.3891.	40 CFR 63.3891 Subpart MMMM
Emission Monitoring	
1. This unit must comply with the applicable emissions monitoring standards as set forth in 40 CFR 63.3968 Subpart MMMM.	40 CFR 63.3968 Subpart MMMM
Recordkeeping and Reporting Requirements	
1. Monthly and rolling 12-month total emissions of volatile organic compounds, including both paint and thinner will be calculated and recorded. Each record must be maintained for at least 5 years. These records will contain the following information: (a) The type and quantity of each VOC containing material used during each calendar month. (b) The VOC content by weight of each coating used as determined by EPA Reference Method 24 or by a method approved in writing by ADEM in advance of its use. (c) The amount of VOC's emitted each month expressed in units of pounds and tons. (d) The consecutive 12-month rolling total of all VOC's emitted in units of pounds and tons.	Rule 335-3-16-.05

Federally Enforceable Provisos	Regulations
2. The facility must submit a semi-annual compliance report as specified in §63.3920.	40 CFR §63.3920 Subpart MMMM
3. The facility must keep a record of the coating operations on which each compliance option was used and the time period.	40 CFR §63.3930 Subpart MMMM
4. The facility must keep the following records: the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning material used each month using the equations specified in §63.3951; and if applicable, the calculation used to determine the mass of organic HAP in waste materials according the §63.3951 (e) (4); the calculation of the total volume of coating solids used each month; and the calculation of each 12-month organic HAP emission rate.	40 CFR §63.3930 Subpart MMMM
5. The facility must keep a record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period.	40 CFR §63.3930 (d) Subpart MMMM
6. The facility must keep a record of the mass fraction of organic HAP of each coating, thinner and/or other additive, and cleaning material used during each compliance period.	40 CFR §63.3930 (e) Subpart MMMM
7. The facility must keep a record of the volume fraction of coating solids of each coating used during each compliance period.	40 CFR §63.3930 (f) Subpart MMMM
8. The facility must keep a record of the density of each coating, thinner and/or other additives, and cleaning material used during each compliance period.	40 CFR §63.3930 (g) Subpart MMMM
9. If allowance in Equation 1 for organic HAP contained in waste material sent to or designated for shipment to a TSDF (treatment, storage, disposal facility) is used in Equation 1, the facility must keep a record of the following: (a) Name and address of each TSDF, a statement of which subpart(s) under 40 CFR 262, 264, 265, 266 applies to the facility, and date of each shipment.	40 CFR §63.3930 (h) Subpart MMMM

Federally Enforceable Provisos	Regulations
(i) Identification of the coating operations producing waste materials included in each shipment and the month(s) the allowance was used for these materials. (ii) Methodologies used to determine the total amount of waste materials sent to or designated for shipment to a TSDF each month and the mass of organic HAP contained in these waste materials.	
10. The facility must keep a record of the date, time, and duration of each deviation.	40 CFR §63.3930 (j) Subpart MMMM
1. If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in following are implemented: (1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers. (2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized. (3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes. (4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents. (5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.	40 CFR 63.3893 (b) Subpart MMMM

Summary Page for Scrap Handling

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
FUG 001	Scrap Handling	PM	N/A	N/A
FUG 001	Scrap Handling	Opacity	N/A	N/A

Provisos for Scrap Handling

Federally Enforceable Provisos	Regulations
Applicability	
1. This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
2. The facility must comply with the work practice standards in §63.7700(b) and (c), as applicable.	40 CFR Part 63 Subpart EEEEE
3. These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries".	40 CFR Part 63 Subpart EEEEE
Emission Standards	
1. This Source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
Compliance and Performance Test Methods and Procedures	
1. The facility must comply with the work practice standards in §63.7700(b) and (c), as applicable.	40 CFR Part 63 Subpart EEEEE
Emission Monitoring	
1. The facility must comply with the work practice standards in §63.7700(b) and (c), as applicable.	40 CFR Part 63 Subpart EEEEE
Recordkeeping and Reporting Requirements	
1. The facility must comply with the work practice standards in §63.7700(b) and (c), as applicable.	40 CFR Part 63 Subpart EEEEE

Summary Page for Sand Reclamation System including Lump Reducer, Thermal Reclaimer Unit, Fluidized Bed Cooler, Two Storage Silos and Two Mechanical Grinding Processes with Two (2) Baghouses

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
EP-018	Thermal Reclamer Unit, Lump Reducer, Fluidized Bed Cooler, Two Storage Silos	PM	0.040 gr/dscf	§60.732 (a) Subpart UUU
EP-018	Thermal Reclamer Unit, Lump Reducer, Fluidized Bed Cooler, Two Storage Silos	Opacity	10%	§60.732 (b) Subpart UUU
EP-019	Mechanical Grinding Process	PM	N/A	N/A
EP-019	Mechanical Grinding Process	Opacity	(see general proviso 28)	335-3-4-.01

Provisos for Sand Reclamation System including Lump Reducer, Thermal Reclaimer Unit, Fluidized Bed Cooler, Two Storage Silos and Two Mechanical Grinding Processes with Two Baghouses

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. These sources are subject to the applicable requirements of 40 CFR Part 60 Subpart UUU, "National Standards of Performance for Calciners and Dryers in Mineral Industries".	40 CFR Part 60 Subpart UUU
3. The Mechanical Grinders are subject to no additional specific requirements other than those listed in the General Permit Provisos.	Rule 335-3-4-.01
Emission Standards	
1. Particulate matter emissions from Thermal Reclaimer unit shall not exceed 0.040 gr/dscf.	40 CFR §60.732 (a) Subpart UUU
2. This source shall not emit particulate matter of Opacity of more than 10% unless the emissions are discharged from an affected facilty using a wet scrubbing control device. CFR Part 60 Subpart UUU, "National Standards of Performance for Calciners and Dryers in Mineral Industries".	40 CFR §60.732 (b) Subpart UUU
3. The Mechanical Grinders are subject to no additional specific requirements other than those listed in the General Permit Provisos.	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack. Except as provided in §60.8(b)	40 CFR §60.736 (a) Subpart UUU
2. The facility shall determine compliance with the particulate matter standards in §60.732 as follows: (a) Method 5 shall be used to determine the particulate matter concentration. The sampling and volume for each test run shall be at least 2 hours and 1.70 dscm. (b) Method 9 and procedures in §60.11 shall be used to determine opacity from stack emissions.	40 CFR §60.736 (b) Subpart UUU
Emission Monitoring	
1. The facility shall install, calibrate, maintain and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.	40 CFR §60.734 (a) Subpart UUU
2. The Facility in lieu of a continuous monitoring system can have a certified visible emissions observer measure and record three 6-minute averages of opacity of visible emissions to the atmosphere each day of operation in accordance with method 9 of Appendix A of Part 60.	40 CFR §60.734 (b) Subpart UUU
Recordkeeping and Reporting Requirements	
1. The facility must maintain records and measurements required in §60.734 of the subpart for at least 2 years.	40 CFR §60.735 (a) Subpart UUU
2. The owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows: (a) All 6-minute periods during which the average opacity from dry control devices is greater than 10%.	40 CFR §60.735 (c) Subpart UUU

Summary Page for Emergency Diesel Fired Water Suppression System (209 HP)

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
EP-020	Emergency Diesel Fired Water Suppression System (209 HP)	PM	N/A	40 CFR Part 60 Subpart IIII

Emergency Diesel Fired Water Suppression System (209 HP)
Provisos

	Regulations
1. Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "Major Source Operating Permits".	Rule 335-3-16-.03
2. This source is subject to the applicable requirements of 40 CFR Part 60 Subpart IIII, "National Standards of Performance Stationary Compression Ignition Internal Combustion Engines (CI ICE)" for Engines manufactured after April 1, 2006.	40 CFR Part 60 Subpart IIII
2. Emission Standards	
1. The Permittee must comply with Emission Standards for Stationary Fire Pump Engines as stated in §60.4202(d) and §60.4205(c) and Table 4.	40 CFR §60.4202(d) 40 CFR §60.4205(c)
2. The Permittee of a stationary CI ICE must comply with the fuel requirements as stated in §60.4207(a) and (b) which requires the use of diesel fuel that meets the requirements of 40 CFR 80.510(b).	40 CFR §60.4207(a & b)
3. Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60 (latest edition), Appendix A shall be used in the determination of filterable particulate matter emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR Part 60 (latest edition), Appendix A shall be used in the determination of opacity.	Rule 335-3-1-.05
3. The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 and §60.4205 over the entire life of the engine.	40 CFR §60.4206
4. The Permittee must operate the stationary CI ICE and comply with emission standards as specified in §60.4211 (a), (c), (f) and (g) as applicable.	40 CFR §60.4211(a) (c), (f) and (g)
5. The Permittee of a stationary IC ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so as specified in paragraphs (a) through (e) of §60.4212.	40 CFR §60.4212 (a-e)
4. Emission Monitoring	
1. The Permittee or operator of an emergency stationary CI ICE	40 CFR §60.4209(b)

	Regulations
that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.	
5. Recordkeeping and Reporting Requirements	
1. The facility shall record and maintain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time.	40 CFR §60.4214(b)
2. If the stationary CI ICE is equipped with a diesel particulate filter, the Permittee must keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit has been approached.	40 CFR §60.4214(c)
3. If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purpose specified in §60.4211(f)(3)(i), the Permittee must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.	40 CFR §60.4214(d)

APPENDIX

COMPLIANCE ASSURANCE MONITORING (CAM)

Table 1

GFD Grinding Baghouse (EP 003)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. ***Data Representativeness***	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. ***Verification of Operational Status***	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. ***QA/QC Practices and Criteria***	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. ***Monitoring Frequency***	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 2
GFD Molding Baghouse (EP 005)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. ***Data Representativeness***	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. ***Verification of Operational Status***	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. ***QA/QC Practices and Criteria***	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. ***Monitoring Frequency***	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 3
DISA Molding Baghouse (EP 006)

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II. Indicator Range	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III. Performance Criteria			
A. ***Data Representativeness***	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
B. ***Verification of Operational Status***	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
C. ***QA/QC Practices and Criteria***	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
D. ***Monitoring Frequency***	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
Averaging Period	No average is taken.	No average is taken.	Not applicable.

Table 4

DISA Finishing Baghouse (EP 007)

		Indicator No. 1	Indicator No. 2	Indicator No. 3
I.	**Indicator**	Pressure drop	Visible Emissions (VE)	Inspection/maintenance
	Measurement Approach	Pressure drop through the baghouse is measured once per day using a differential pressure gauge.	Visual checks will be performed once per day, weather permitting, of the baghouse stack by a person familiar with Method 9.	Daily, weekly and annual inspections; maintenance performed as needed.
II.	**Indicator Range**	The indicator range is a pressure drop between 1 and 5 inches H_2O. Excursions trigger an inspection, corrective action, and reporting requirement.	If VE are observed in excess of 10% opacity, and not corrected within a period of 1 hour, then a Method 9 must be performed within 4 hours of the observation.	An excursion is defined as failure to perform daily, weekly or annual inspections.
III.	**Performance Criteria**			
	A. ***Data Representativeness***	Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is ±0.5 inches H_2O	Visual checks are performed at the baghouse stack outlet.	Inspections are performed both the internal and external structures of the baghouse.
	B. ***Verification of Operational Status***	Conducted as part of weekly inspection.	Conducted as part of daily inspection.	Not applicable.
	C. ***QA/QC Practices and Criteria***	Pressure gauge calibrated annually.	Person conducting the VE checks are familiar with Method 9.	Qualified personnel perform inspection.
	D. ***Monitoring Frequency***	Pressure drop is measured daily.	VE readings are taken daily, weather permitting.	Daily, Weekly and Annual inspections.
	Data Collection Procedure	The pressure drop is recorded on the daily air inspection checklist.	The VE reading is recorded on the daily air inspection checklist.	Records are maintained to document the weekly inspections and any required maintenance.
	Averaging Period	No average is taken.	No average is taken.	Not applicable.